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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,285

08/27/2003

Shinichi Tsukida

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EXAMINER

ROYER, WILLIAM J

ART UNIT

PAPER NUMBER

2852

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/648,285	Applicant(s) TSUKIDA ET AL.	
	Examiner William J. Royer	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-13,15-21,23-26 and 28-37 is/are rejected.
- 7) ☒ Claim(s) 2,10,14,22 and 27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10062003; 08272005</u> . | 6) <input type="checkbox"/> Other: ____. |

Drawings

The drawings are objected to because of the following informalities:

In Figure 6, change reference numeral "16" to --- 6 ---.

Figure 12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities:

In Figure 10A, reference characters "S113" and "S114" are shown, however, neither reference character appears to be identified in the specification.

In Figure 10B, reference characters "S109", "S111", "S115", "S116", "S118", "S119", "S120", "S121", "S122" and "S123" are shown, however, none of the noted reference characters appear to be identified in the specification.

In Figure 17, reference characters "S404" and "S408" are shown, however, neither reference character appears to be identified in the specification.

On page 5, lines 1 and 20, change "means" to --- devices ---.

On page 5, line 21, change "a form" to -- the form ---.

On page 6, line 4, change "means" to --- devices ---.

On page 6, line 27, change "damaging" to --- damage ---.

On page 7, line 5, change "metal thin plate" to --- thin metal plate ---.

On page 14, line 6, change "mechanism," to --- mechanism. ---.

On page 14, delete lines 25-27 since they are identical to lines 22-24.

On page 16, lines 8 and 16, change "for" to --- which are ---.

On page 21, lines 13-14, change "core metal" to --- metal core ---.

On page 21, lines 15-16 and 25, change "metal thin plate" to -- thin metal plate --.

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On page 21, lines 18 and 27, change "thin plate" to --- thin metal plate ---.

On page 22, line 19, change "a suspend" to --- suspend ---.

On page 24, line 8, change "the registration roller" to --- registration rollers ---.

On page 25, line 14, delete ---, etc. ---.

On page 25, line 25, change "clutch" to --- contact/separation mechanism (clutch)

---.

On page 32, lines 24, 25 and 27, delete each occurrence of --- etc. ---.

On page 33, line 1, delete --- etc. ---.

On page 34, lines 14 and 20, change "means" to --- devices ---.

On page 36, line 12, delete --- main body ---.

On page 36, lines 20 and 24, after "apparatus" insert --- A ---.

On page 38, line 13, change "means" to --- devices ---.

On page 38, line 27, after "roller" insert --- 5 ---.

On page 39, line 2, after "drum" insert --- 1 ---.

On page 40, line 18, after "apparatus" insert --- A ---.

On page 43, line 27, before "optical" insert --- an ---.

On page 44, line 8, after "window" insert --- 23 ---.

On page 45, line 26, change "means" to --- devices ---.

On page 48, line 9, change "S16" to --- S26 ---.

On page 53, line 3, change "means" to --- devices ---.

On page 53, line 14, after "apparatus" insert --- A ---.

On page 53, line 25, after "roller" insert --- 2 ---.

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On page 54, lines 1 and 3, change "S8" to --- S108 ---.

On page 54, line 6, change "apparatuses" to --- apparatus ---.

On page 55, lines 20 and 27, after "roller" insert --- 5 ---.

On page 58, line 16, change "means" to --- devices ---.

On page 60, line 1, delete --- main body ---.

On page 60, lines 8 and 19, after "apparatus" insert --- A ---.

On page 61, reference character "E" is used to identify a "development cartridge", however, reference character "E" does not appear to be shown in any of the figures.

On page 62, lines 1, 3 and 7, after "apparatus" insert --- A ---.

On page 63, line 16, change "judge" to --- judged ---.

On page 67, lines 4 and 6, after "apparatus" insert --- A ---.

On page 69, line 19, change "means" to --- device ---.

On page 74, lines 14, 16 and 21, after "apparatus" insert --- A ---.

On page 74, line 25, change "means" to --- devices ---.

On page 78, line 18, change "development cartridges" to -- developing devices --.

Appropriate correction is required.

The abstract of the disclosure is objected to because it exceeds the recommended 150 word limit. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP § 608.01(b).

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17 and 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 is unclear as currently written and consequently is considered indefinite. It is unclear what is meant by: "wherein before image formation means at least before the developer carrying member carries the developer to the electrostatic latent image" It is noted that the previous claims have not defined an image formation means".

Claim 31 is indefinite because this claim states that "the developer carrying member is separated from the surface of the image bearing member", however, no means for separating the developer carrying member has been defined.

Claim 32 is indefinite because this claim states that "the developer carrying member is separated from the surface of the image bearing member", however, no means for separating the developer carrying member has been defined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-9, 11-13, 15-21, 23-26, 28-30, 32 and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano et al in view of Hiroki et al.

Referring to Figure 1, Asano et al disclose the basic features of their invention which include an image formation apparatus that has a developing device 4 having an agitating and charging element 4a of a developer G to render visible an electrostatic latent image written on a photoreceptor 1 with the developer G, and a performance maintaining controller 5 for executing a performance maintaining initial sequence A for agitating and charging the developer G uniformly to such a degree that aggregating of the developer G in the developing device 4 is at least eliminated under a condition that the image formation apparatus is first used. It is disclosed that the developing device is mainly intended for a developing device using a dual-component developer, but is not necessarily limited to this. Further, it is disclosed that the agitating and charging element 4a may be any element for agitating and charging a developer. It is also disclosed that the performance maintaining controller 5 may execute a performance maintaining sequence B for uniformly agitating and charging the developer G in the developing device 4 at least based on elapsed time since the immediately preceding image formation mode. Further, it is disclosed that the performance maintaining sequence B may be to uniformly agitate and charge the developer G in the developing device 4 based on the elapsed time since the immediately preceding image formation mode and the environmental condition of the image formation apparatus, i.e., temperature and humidity conditions. It is further disclosed that as a representative determination technique as to "the condition that the image formation apparatus is first used" for example, in a form in which a process cartridge that can be attached and detached from the main unit of the image formation apparatus is installed, an identifier

indicating that the process cartridge is unused may be provided and the performance maintaining controller 5 may determine whether or not the image formation apparatus is first used based on the identifier information of the process cartridge to execute the performance maintaining initial sequence A. In Figure 3, a further more detailed embodiment of their invention is described in view of the basic teachings discussed above. In this embodiment it is disclosed that in each developing device 24, as a developing motor is driven, a developing roller 62 and developer agitation and transport members 64 and 65 are rotated to agitate and charge a developer G to perform performance maintaining sequences as discussed above.

Asano et al disclose all the basic features claimed by the applicant in the above noted claims except for specifically providing a mechanism for selectively moving the developing roller into and out of contact with the photoreceptor. It is noted that in Figures 1 and 2, the developing roller is shown in contact with the photoreceptor while in Figure 3 the developing roller is shown out of contact with the photoreceptor.

Hiroki et al disclose means for selectively moving a developing roller into and out of contact with a photoreceptor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the means for selectively moving a developing roller into and out of contact with a photoreceptor as disclosed by Hiroki et al could be provided in the apparatus disclosed by Asano et al because both Asano et al and Hiroki et al disclose developing devices similar in construction that are shown both in contact and out of contact with a photoreceptor.

Allowable Subject Matter

Claims 2, 10, 14, 22 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 31 and 33 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Relevant Prior Art

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bares discloses an adaptive setup for a printing machine that stores time and date for each usage.

Budnik et al disclose a method and apparatus for automatic CRU setup and cleaner blade lubrication.

Hiroki discloses an image forming apparatus that has means to contact and separate a developing roller from an image carrier.

Yamaguchi et al disclose a developer agitating system.


Sasago et al disclose a process cartridge comprising storing means for storing information controlling a charge elimination operation.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Royer whose telephone number is (571) 272-2140. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William J. Royer
Primary Examiner
Art Unit 2852